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NEWS 3	JUL 28 EPFULL enhanced with additional legal status information from the epoline Register
NEWS 4	JUL 28 IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS 5	JUL 28 STN Viewer performance improved
NEWS 6	AUG 01 INPADOCDB and INPAFAMDB coverage enhanced
NEWS 7	AUG 13 CA/Caplus enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS 8	AUG 15 CAOLD to be discontinued on December 31, 2008
NEWS 9	AUG 15 Caplus currency for Korean patents enhanced
NEWS 10	AUG 27 CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS 11	SEP 18 Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS 12	SEP 25 CA/Caplus current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances
NEWS 13	SEP 26 WPIDS, WPINDEX, and WPIX coverage of Chinese and Korean patents enhanced
NEWS 14	SEP 29 IFICLS enhanced with new super search field
NEWS 15	SEP 29 EMBASE and EMBAL enhanced with new search and display fields
NEWS 16	SEP 30 CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents
NEWS 17	OCT 07 EPFULL enhanced with full implementation of EPC2000
NEWS 18	OCT 07 Multiple databases enhanced for more flexible patent number searching
NEWS 19	OCT 22 Current-awareness alert (SDI) setup and editing enhanced
NEWS 20	OCT 22 WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT Applications
NEWS 21	OCT 24 CHEMLIST enhanced with intermediate list of pre-registered REACH substances

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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0.21 0.21  
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STRUCTURE FILE UPDATES: 18 NOV 2008 HIGHEST RN 1073232-10-6  
DICTIONARY FILE UPDATES: 18 NOV 2008 HIGHEST RN 1073232-10-6

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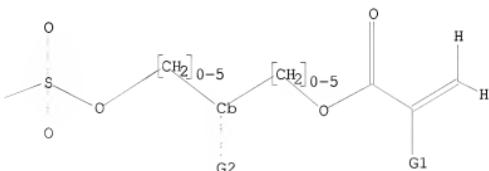
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[1] STRUCTURE UPLOADED

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=> d l1
L1 HAS NO ANSWERS
L1           STR
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G1: H, Me, Et, CF<sub>3</sub>, CC<sub>1</sub>Cl<sub>3</sub>, CBr<sub>3</sub>, Cl<sub>3</sub>

G2 X, Ak, 0

Structure attributes must be viewed using STN Express query preparation.

=> s 11  
SAMPLE SEARCH INITIATED 17:21:33 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1468 TO ITERATE

100.0% PROCESSED 1468 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 27062 TO 31658  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 full  
FULL SEARCH INITIATED 17:21:37 FILE 'REGISTRY'  
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SEARCH TIME: 00.00.01

L3 6 SEA SSS FUL L1

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FULL ESTIMATED COST ENTRY SESSION  
178.36 178.57

FILE 'CAPLUS' ENTERED AT 17:21:42 ON 19 NOV 2008  
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FILE COVERS 1907 - 19 Nov 2008 VOL 149 ISS 21  
FILE LAST UPDATED: 18 Nov 2008 (20081118/ED)

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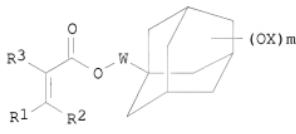
<http://www.cas.org/legal/infopolicy.html>

=> s 13  
L4 4 L3

=> d 14 ibib abs hitstr 1-  
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 20071237498 CAPLUS  
 DOCUMENT NUMBER: 147:494040  
 TITLE: Antireflective film coatings with good adhesion to  
 far-UV, x-ray, or electron-beam resists and polymers  
 therefor  
 INVENTOR(S): Okumura, Arimichi; Koyama, Hiroshi  
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 19pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007284535	A	20071101	JP 2006-112392	20060414
PRIORITY APPLN. INFO.:			JP 2006-112392	20060414
GI				



I

AB The polymers are prepared from monomers I [R1-R3 = H, F, Cl-6 (fluoro)alkyl; W = single bond, bridging group; m = 1, 2, 3; OX = OH, OSO2R4, OCOR5, OCOC(=O)R6 (R4-R6 = alkyl;  $\geq 1$  of X is other than H)]. Coatings containing the polymers and their crosslinking agents, forming films effectively preventing upper resist patterns from degrading, are also claimed.

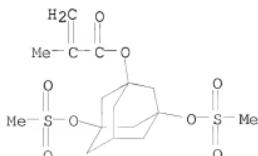
IT 952678-95-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (antireflective film coatings containing adamantine group-containing macromols.

and with good adhesion to radiation-sensitive photoresists)

RN 952678-95-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester (CA INDEX NAME)



IT 953812-11-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(antireflective film coatings containing adamantan group-containing macromols.

and with good adhesion to radiation-sensitive photoresists)

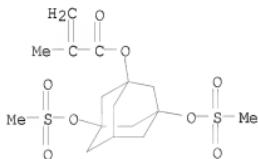
RN 953812-11-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

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CRN 952678-95-4

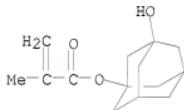
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CM 2

CRN 115372-36-6

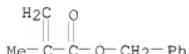
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CM 3

CRN 2495-37-6

CMF C11 H12 O2



L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

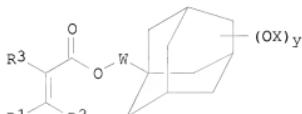
ACCESSION NUMBER: 2007:1237276 CAPLUS

DOCUMENT NUMBER: 147:511608

TITLE: Photoresist resin compositions with good substrate adhesion and dry etching resistance, their (meth)acryl monomers, and their macromolecules

INVENTOR(S): Koyama, Hiroshi; Murai, Yoshiyuki; Nishimura, Masamichi  
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 25pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007284381	A	20071101	JP 2006-114129	20060418
PRIORITY APPLN. INFO.:			JP 2006-114129	20060418
OTHER SOURCE(S):	MARPAT 147:511608			
GI				



I

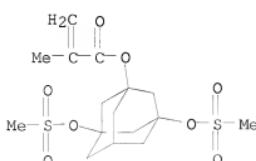
AB Monomers represented by I [R1-R3 = H, F, Cl-6 (fluoro)alkyl; W = single bond, bridging group; y = 1-3; OX = OSO2Rd, OCORe, OCOC(=O)Rf (Rd, Re, Rf = alkyl)], their polymers preferably having acid-labile alkali-soluble groups, and photoresist compns. containing the macromols. and photoacid generators are sep. claimed. Also claimed is a process for applying the photoresists on substrates, exposing, and developing to form precision patterns.

IT 952678-95-4P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (pos. photoresists containing acid-labile macromols. having good balance between dry etching resistance, solvent solubility, and alkali developability)

RN 952678-95-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester (CA INDEX NAME)



IT 955027-97-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photoresists containing acid-labile macromols. having good balance between dry etching resistance, solvent solubility, and alkali developability)

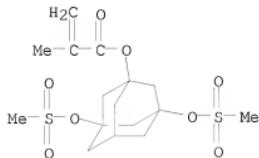
RN 955027-97-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-yethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 952678-95-4

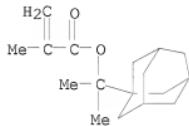
CMF C16 H24 O8 S2



CM 2

CRN 279218-76-7

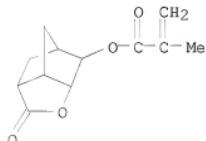
CMF C17 H26 O2



CM 3

CRN 254900-07-7

CMF C12 H14 O4



DOCUMENT NUMBER:

147:477561

TITLE:

Substituted adamantyl (meth)acrylate monomers, photoresist protective films of their polymers for semiconductors in immersion exposure, and manufacture of semiconductors using them

INVENTOR(S):

Koyama, Hiroshi; Okumura, Arimichi

PATENT ASSIGNEE(S):

Daicel Chemical Industries, Ltd., Japan  
Jpn. Kokai Tokkyo Koho, 17pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007284368	A	20071101	JP 2006-111911	20060414
			JP 2006-111911	20060414

PRIORITY APPLN. INFO.:

MARPAT 147:477561

OTHER SOURCE(S): AB The invention relates to (meth)acrylate monomers of C(R1)(R2):C(R3)CO2W1 [R1 - R3 = H, F, (H or F-substituted) C1-6 alkyl; W = single bond, linking group; Q1 = (XO)m-substituted 5-adamantyl; m = 1-3; OX = OSO2R4, O2CR5, O2CCH2COR6; R4 - R6 = (substituted)alkyl]. Pos. photoresists patterned by immersion exposure using the substituted adamantyl (meth)acrylate polymer films showed high fineness and accuracy.

IT 952678-98-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(protective film; substituted adamantyl (meth)acrylate polymer  
protective films for semiconductor photoresists by immersion exposure)

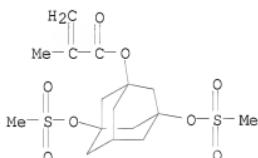
RN 952678-98-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with  
3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl  
2-methyl-2-propenoate and cyclohexyl 2-methyl-2-propenoate (CA INDEX  
NAME)

CM 1

CRN 952678-95-4

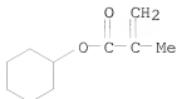
CMF C16 H24 O8 S2



CM 2

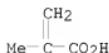
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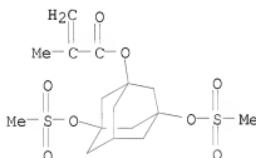


CM 3

CRN 79-41-4  
CMF C4 H6 O2

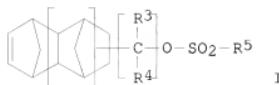


IT 952678-95-4P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(substituted adamantyl (meth)acrylate polymer protective films for semiconductor photoresists by immersion exposure)  
RN 952678-95-4 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester (CA INDEX NAME)



L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2006:386486 CAPLUS  
DOCUMENT NUMBER: 144:422706  
TITLE: Acrylic acid ester-based polymers, positive resist compositions, and formation of resist patterns  
INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Shogo; Shiono, Hirotoshi; Haneda, Hideo  
PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006111733	A	20060427	JP 2004-300716	20041014
PRIORITY APPLN. INFO.:			JP 2004-300716	20041014
OTHER SOURCE(S):	MARPAT	144:422706		



AB The polymers are (A)  $\alpha$ -lower alkyl acrylate-based units having acid-dissociating and dissoln.-inhibiting groups and (B)  $\text{CH}_2\text{CR}[\text{C}(\text{O})\text{O}(\text{CR}_1\text{R}_2)\text{sX}((\text{CR}_3\text{R}_4)\text{tOSO}_2\text{R}_5)]\text{u}$  [ $\text{R}$ ,  $\text{R}_1\text{-R}_4 = \text{H}$ , lower alkyl;  $\text{R}_1 = \text{R}_2 \neq \text{alkyl}$ ;  $\text{R}_5 = (\text{halogenated})$  lower alkyl;  $s, t = 0-3$ ;  $u = 1-3$ ;  $\text{X} =$  cyclic group]. The resist compns. comprise the polymers, whose alkali solubility is increased by the action of acids, and acid generators. Resist patterns are formed by applying the compns. on substrates, exposing, and developing. Sulfonic acid group-containing norbornene derivs. I [ $\text{R}_3, \text{R}_4 = \text{H}$ , lower alkyl;  $\text{R}_5 = (\text{halogenated})$  lower alkyl;  $a = 0, 1$ ;  $t = 0-3$ ] are also claimed. Resolution of the resist compns. is improved.

IT 883868-04-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(sulfonyl-containing acrylate-based polymers for high-resolution pos. resist compns.)

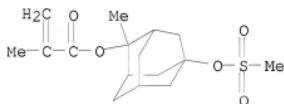
RN 883868-04-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 2-methyl-5-[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 883868-03-9

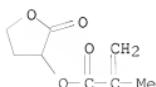
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CM 2

CRN 195000-66-9

CMF C8 H10 O4



CM 3

CRN 115372-36-6  
CMF C14 H20 O3

